

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,149	09/21/2005	Yusuke Fukumoto	043888-0400	7334
53080 7590 11/27/2007 MCDERMOTT WILL & EMERY LLP			EXAMINER	
600 13TH STREET, NW WASHINGTON, DC 20005-3096			MARTIN, ANGELA J	
			ART UNIT	PAPER NUMBER
		· .	1795	
•			MAIL DATE	DELIVERY MODE
			11/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/550,149	FUKUMOTO ET AL.			
		Examiner	Art Unit			
		Angela J. Martin	1795			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Repl	NED STATUTORY PERIOD FOR REPLY	IS SET TO EXPIRE 3 MONTH/	S) OR THIRTY (30) DAVS			
WHICHEVE - Extensions of tafter SIX (6) M - If NO period fo - Failure to reply Any reply rece	R IS LONGER, FROM THE MAILING DA time may be available under the provisions of 37 CFR 1.13 IONTHS from the mailing date of this communication. It is specified above, the maximum statutory period we within the set or extended period for reply will, by statute, ived by the Office later than three months after the mailing term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED	I. lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status						
1)⊠ Respo	onsive to communication(s) filed on <u>04 Se</u>					
,—	This action is FINAL. 2b)⊠ This action is non-final.					
· —	- ''					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of	Claims					
•	(s) <u>1-8</u> is/are pending in the application.					
ŕ	4a) Of the above claim(s) is/are withdrawn from consideration.					
· <u> </u>	5) Claim(s) is/are allowed.					
*	(s) <u>1-8</u> is/are rejected. (s) is/are objected to.					
•	(s) are subject to restriction and/or	election requirement.				
Application Pa						
•	•					
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
•	ant may not request that any objection to the o					
• •	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 3	35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1.	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Dra	ftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite			
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/23/07. 5) Notice of Informal Patent Application 6) Other:						

10/550,149 Art Unit: 1795

DETAILED ACTION

This Office Action is responsive to the Amendment filed on September 4, 2007. The Applicant has amended claims 1, 2, 4, and 8. However, a new rejection is presented for the following reasons of record.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki et al., U.S. Pat. No. 6,423,446 B1, in view of Yasui et al., JP 2001-179151 (machine translation).

Miyazaki et al., teach a method for producing lithium ion secondary batteries (col. 1, lines 9-13), comprising the steps of: (A) preparing an electrode sheet with lead-forming parts (col. 2, lines 4-11), (B) intermittently forming porous insulating layers comprising an inorganic oxide filler and a binder on a surface of said electrode sheet excluding said lead-forming parts (col. 2, lines 58-65 and col. 4, lines 43-49; col. 5, lines 43-56), (C) connecting a lead to each of said lead-forming parts (col. 23, lines 62-67), and (D) fabricating batteries by using the electrode sheet to which said leads are connected, wherein said step B

Application/Control Number:

10/550,149 Art Unit: 1795

comprises: a step of applying a slurry comprising the inorganic oxide filler and the binder to the outer surface of a gravure roll, and transferring the slurry applied to the outer surface of said gravure roll onto a surface of said electrode sheet that is being transported by a plurality of guide rolls excluding said lead-forming parts; and a step of moving at least one selected from said gravure roll and said guide rolls to move said electrode sheet away from said gravure roll at said lead-forming parts (col. 12, lines 13-29).

Yasui et al., teach a method, comprising the steps of: (A) preparing a sheet with lead-forming parts. (B) intermittently forming porous insulating layers on a surface of said sheet excluding said lead-forming parts, (C) connecting a lead to each of said leadforming parts, wherein said step B comprises: the step of applying a slurry to the outer surface of a gravure roll, and transferring the slurry applied to the outer surface of said gravure roll on a surface of said sheet that is being transported by a plurality of guide rolls excluding said lead-forming parts; and the step of moving at least one selected from said gravure roll and said guide rolls to make said sheet away from said gravure roll in said lead-forming part (0036-0040). The method in accordance with claim 1, wherein said step A comprises the step of applying a paste comprising an electrode material mixture to the outer surface of a gravure roll, and transferring the paste applied to the outer surface of said gravure roll on a surface of an electrode core member that is being transported by a plurality of guide rolls 0022-0024). The method in accordance with claim 1, wherein at least a part of the outer surface of said gravure roll is covered with ceramic (0012). The method in accordance with claim 2, wherein at least a part of

Application/Control Number:

10/550,149 Art Unit: 1795

the outer surface of said gravure roll is covered with ceramic (0012). The method in

surface of said gravure roll is scraped off by a blade without being transferred to the

accordance with claim 1, wherein in said step B a part of the slurry applied to the outer

surface of said electrode sheet (0012; 0017). The method in accordance with claim 2,

wherein in said step A a part of the paste applied to the outer surface of said gravure

roll is scraped off by a blade without being transferred to the surface of said electrode

core member. (0012; 0017). The method f in accordance with claim 1, wherein the

traveling direction of the outer surface of said gravure roll is opposite to the traveling

direction of said electrode sheet (0038). The method for wherein the traveling direction

of the outer surface of said gravure roll is opposite to the traveling direction of said

electrode core member (0038).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert the teachings of Yasui et al., into the teachings of Miyazaki et al., because while Miyazaki et al., teach a method of making the battery in which gravure coating may be employed, Yasui teaches a gravure coating method "capable of remarkable and precisely applying a coating agent all over to surely obtain uniform thickness on ever kind of thin base materials."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Watanabe et al., JP 08-229481 teach intermittent coating by gravure device.

Application/Control Number:

10/550,149 Art Unit: 1795

Response to Arguments

4. Applicant's arguments with respect to above claims have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-1288. The examiner can normally be reached on Monday-Friday from 10:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJM